

310 CMR 60.05: Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation

Authority M.G.L. c. 21N; M.G.L. c. 111

(1) Purpose

The purpose of 310 CMR 60.05 is to assist the Commonwealth in achieving the GHG emissions reduction goals adopted pursuant to the Climate Protection and Green Economy Act as codified at M.G.L. c. 21N (3)(b) by: (1) requiring MassDOT to demonstrate its GHG reduction commitments and targets in the CECP for 2020 are achieved; and (2) requiring the MPOs to evaluate and track the GHG emissions and impacts of Regional Transportation Plans (RTPs), Transportation Improvement Programs (TIPs), and State Transportation Improvement Programs (STIPs); and (3) requiring the MPOs, in consultation with MassDOT, to develop and utilize procedures to prioritize and select projects in RTPs, TIPs, STIPs based on factors that include GHG emissions and impacts.

(2) Definitions

Appropriate planning assumptions means the data, models, and expectations about future year conditions that serve as inputs to forecasting models used for estimating future year GHG emissions. This shall include best assumptions about future land use, transportation system condition and operations, and travel costs.

Build Condition means transportation facilities and projects that have a reasonable expectation of being open and operating by the end of applicable milestone and horizon years (e.g., 2020, 2030, 2035, and 2040, as appropriate).

Clean Energy and Climate Plan (CECP) for 2020 means the plan issued by EOEEA on December 29, 2010 and as updated pursuant to the Climate Protection and Green Economy Act and includes a statewide target for GHG emissions to be achieved in part through travel behavior changes that are facilitated by the mix of new transportation projects and policies that are implemented in RTPs, TIPs, and STIPs.

Climate Protection and Green Economy Act means the climate change statute codified at M.G.L. c. 21N that was included as part of Chapter 298 of the Acts of 2008, the Global Warming Solutions Act (GWSA).

Consultation means that one party confers with another identified party, provides all appropriate information to that party needed for meaningful input, and, prior to taking any action, considers the views of that party and responds to those views in a timely, substantive written manner prior to any final decision on such action. Such views and written response shall be made part of the record of any decision or action.

Department means the Massachusetts Department of Environmental Protection.

EOEEA means the Massachusetts Executive Office of Energy and Environmental Affairs.

GreenDOT means MassDOT's comprehensive environmental responsibility and sustainability initiative that will make MassDOT a national leader in "greening" the state transportation system.

GreenDOT Office means the MassDOT organizational unit that is responsible for coordinating MassDOT activities that support GreenDOT goals and principles, and that tracks progress toward GreenDOT goals and GHG reduction targets.

Greenhouse Gases (GHGs) means the air contaminant that is the aggregate of the group of six gases: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur hexafluoride (SF₆).

GHG Assessment means the requirements of 310 CMR 60.05(5).

Horizon year is a year for which the transportation plan describes the envisioned transportation system.

MassDOT means the Massachusetts Department of Transportation.

Metropolitan Planning Organizations (MPOs) means the Massachusetts organizations designated as being responsible, together with the Commonwealth, for conducting the continuing, cooperative, and comprehensive planning process under 23 U.S.C. 134 and 49 U.S.C. 1607. It is the forum for cooperative transportation decision-making. For the purposes of 310 CMR 60.05, Regional Planning Agencies (RPA) in the Commonwealth of Massachusetts which have not been formally designated as MPOs under 23 U.S.C. 134 and 49 U.S.C. 1607 shall be subject to the same requirements as MPOs under these regulations.

No-build condition means existing transportation facilities plus those projects that are under construction, have been advertised, or have been included in the first year of the STIP.

Regional Planning Agencies (RPA) means one of the 13 Massachusetts commissions, councils, or councils of government authorized to be formed under MGL Chapter 40B.

RTA means one of the 16 Massachusetts regional transit authorities including the Massachusetts Bay Transportation Authority (MBTA).

Regional Transportation Plan (RTP) means the official intermodal metropolitan transportation plan that is developed through the metropolitan planning process for the metropolitan planning area, developed pursuant to 23 CFR part 450.

Statewide Transportation Improvement Program (STIP) means the compilation of the thirteen regional TIPs prepared annually by the MPOs and includes a listing of priority transportation projects (highway and transit) listed by funding category and fiscal year.

Transportation Improvement Program (TIP) means a staged, multiyear, intermodal program of transportation projects covering a metropolitan planning area which is consistent with the metropolitan transportation plan, and developed pursuant to 23 CFR part 450.

(3) Applicability

(a) General.

(1) The provisions of this subpart shall apply statewide.

(2) The provisions of this subpart shall apply to the following GHG emissions: CO₂

(b) Action Applicability.

(1) The MPOs shall:

(i) Evaluate and track the GHG emissions and impacts of RTPs, TIPs, and STIPs.

(ii) In consultation with MassDOT, develop and utilize procedures to prioritize and select projects in RTPs, TIPs, STIPs based on factors that include GHG emissions and impacts.

(iii) Quantify net GHG emissions and impacts resulting from the projects in RTPs, TIPs, and STIPs and certify the MPO has made efforts to minimize GHG emissions and impacts.

(iv) Determine in consultation with the RPA that the appropriate planning assumptions used for GHG emissions modeling are consistent with local land use policies, or that local authorities have made documented and credible commitments to establishing such consistency.

(2) MassDOT shall:

(i) Demonstrate that MassDOT's commitments included in the CECP for 2020 (including actions that support the 2050 reduction strategies) are implemented or supplemental measures are implemented, if necessary. Supplemental measures may include reducing GHG emissions from MassDOT's operational activities.

(ii) Report on the status of these commitments,

(iii) Calculate the GHG emission reductions that are expected to be achieved through these measures, and

(iv) Report on the status and GHG impacts of these measures and initiatives

(3) Prior to adoption and approval of RTPs, TIPs, STIPs by MPOs and MassDOT, MassDOT shall:

(i) Determine that GHG emissions were modeled and projected using appropriate planning assumptions for horizon years 2020 and 2040.

(ii) Determine that the MPOs have adopted and implemented procedures to prioritize and select projects in the RTPs, TIPs, and STIPs based on factors that include GHG emissions impacts.

(iii) Calculate the net GHG emission reductions achieved through implementation of the projects and programs included in RTPs, TIPs, and STIPs, and evaluate these relative to the 2020 and 2050 GHG targets for transportation included in the CECP for 2020.

(iv) Determine in consultation with the RPAs that the appropriate planning assumptions used for GHG emissions modeling are consistent with existing local land use policies, or that local authorities have made documented and credible commitments to establishing such consistency.

(4) MassDOT shall determine that the requirements of 310 CMR 60.05 (3)(b) 1 through 3 have been met in a certification statement included with the endorsed RTPs, TIPs, and STIPs

pursuant to 23 CFR Part 450.

(5) In order to address any shortfall between the projected GHG reductions in 310 CMR 60.05 (3)(b)(3) and the GHG reduction targets in the CECP for 2020, MassDOT shall identify, quantify, and implement supplemental measures and initiatives within the transportation sector and/or areas of MassDOT's responsibilities that will achieve the GHG reduction shortfall by 2020.

(6) MassDOT and/or the GreenDOT Office shall report on the status and GHG impacts of these measures and initiatives in the endorsed RTPs, TIPs, and STIPs pursuant to 310 CMR 60.05 (3)(b)(4).

(c) Effective Date.

(1) MassDOT and the MPOs shall apply the requirements of this regulation related to the GreenDOT goals and the GHG assessments to RTPs, TIPs, and STIPs effective October 1, 2014, with the start of federal fiscal year 2015. In keeping with this effective date, the GreenDOT goals and GHG assessments shall be included in the RTPs, TIPs, and STIPs that are due on September 30, 2015, and in each subsequent version of these documents.

(2) By December 31, 2015, and annually thereafter, the GreenDOT Office shall report on the projected GHG emissions reductions from the RTPs, TIPs, and STIPs; evaluate these projected reductions relative to GHG emissions targets for the GreenDOT Policy; and identify supplemental measures and initiatives within the transportation sector and/or areas of MassDOT's responsibilities that are projected to achieve the GHG emissions targets for the GreenDOT Policy.

(4) Interagency Consultation

(a) Agency Responsibilities

(1) MassDOT

- (i) Coordinates overall consultation process for GHG assessment of RTPs, TIPs, and STIPs;
- (ii) Provides guidance and assistance to MPOs in assessing GHG impacts of RTPs, TIPs, and STIPs and projects, as appropriate, including guidance on modeling and GHG calculation methods and prioritizing and selecting projects based on factors that include GHG impacts;
- (iii) Reviews MPO RTPs, TIPs, STIPs and GHG assessments for acceptability and content and coordinates submittal to the Department for the Department's review;
- (iv) Demonstrates MassDOT is making best efforts on CECP for 2020 commitments, that it is pursuing supplemental GHG reduction measures where it is unable to meet CECP for 2020 commitments, and that these reductions are on track to achieve the GHG emissions targets for 2020 and 2050.

(2) Metropolitan Planning Organizations (MPOs)

- (i) Develop RTPs and TIPs;
- (ii) Ensure that RPAs are using appropriate planning assumptions;
- (iii) Perform regional GHG emissions analysis of RTPs and TIPs;
- (iv) Calculate GHG emissions for RTPs and TIPs;
- (v) Develop public consultation procedures for GHG reporting and related GWSA background consistent with current and approved regional public participation plans.

- (3) RTAs
 - (i) Conduct comprehensive service reviews (CSRs);
 - (ii) Identify service enhancements to increase passenger ridership;
 - (iii) Identify vehicle technology and operational improvements that can reduce GHG emissions;
 - (iv) Work within the MPO process to prioritize and fund GHG reduction projects and investments.
- (4) Department of Environmental Protection (DEP)
 - (i) Provides MassDOT and the MPOs with mobile source inputs for emissions analysis of RTPs, TIPs, STIPs, and projects;
 - (ii) Reviews of RTPs, TIPs, STIPs, and projects;
 - (iii) Issues findings of concurrence or non-concurrence; and
 - (iv) Provides comments to MassDOT and MPO's on GHG emissions reduction projections.
- (5) Executive Office of Energy and Environmental Affairs (EOEEA)
 - (i) Provides MassDOT with user access to software tracking tools and training, and support as needed for MassDOT users; and
 - (ii) Provides comments to DEP and MassDOT on progress including deficiencies and areas of concern regarding GHG emission reductions.
- (b) Agency Consultation
 - (1) Prior to such time that GHG assessment of RTPs, TIPs, STIPs and projects is performed, or at the request of an involved agency, MassDOT shall convene a consultation meeting(s) or conduct similar electronic correspondence with representatives from the MPOs, RTAs, RPAs, EOEEA, and the Department. Prior to convening any consultation meeting(s), MassDOT shall circulate a meeting agenda to the involved agencies. The specific purposes of the state agency consultation meeting(s) and/or correspondence are to:
 - (i) Determine appropriate emissions analysis models and/or other analysis techniques, including consulting on model development and assessing project design factors for modeling;
 - (ii) Select inputs to the most recent EPA-approved or similar emissions factor model;
 - (iii) Identify and confirm regionally significant projects to be included in the regional and/or statewide emissions analysis;
 - (iv) Identify projects which have changed in design and scope from the transportation plan or TIP;
 - (v) Identify exempt projects;
 - (vi) Identify exempt projects and categories of exempt projects which should be treated as non-exempt because they may have adverse air quality impacts and determining appropriate air quality analysis methodologies for analyzing such projects;
 - (vii) Identify RTP, TIP and STIP revisions which add or delete exempt projects; and
 - (viii) Identify appropriate planning assumptions relevant to GHG estimation procedures and calculations.

- (2) MassDOT shall document the outcome(s) of the consultation meeting(s) and shall circulate said documentation to the MPOs, RTAs, EOEEA, and the Department.
- (c) Public consultation procedures
 - (1) Prior to making final endorsements on the RTPs, TIPs, STIPs, and projects, MassDOT and the MPOs shall include the GHG Assessment and information on related GWSA activities in RTPs, TIPs, and STIPs and provide an opportunity for public review and comment on the RTPs, TIPs, and STIPs .
- (5) Criteria and procedures for preparing the GHG assessment
 - (a) When performing the GHG assessment, MassDOT shall determine that:
 - (i) GHG emissions were modeled, projected, or otherwise analyzed using appropriate planning assumptions for all applicable milestone and horizon years prior to adoption and approval of RTPs, TIPs, STIPs by MPOs and MassDOT.
 - (ii) The MPOs have adopted and implemented procedures to prioritize and select projects in the RTPs, TIPs, and STIPs based on factors that include GHG emissions impacts prior to adoption and approval of RTPs, TIPs, and STIPs by MPOs and MassDOT.
 - (iii) The GHG reductions from the RTPs, TIPs, STIP, and the supplemental measures, if necessary, are on track to achieve the 2020 and 2050 targets for transportation included in the CECF for 2020.
 - (b) In terms of demonstrating reasonable further progress toward meeting the GHG targets, MassDOT will identify and describe specific strategies and actions and/or operating procedures that have been taken (or will be taken) by the agency that contribute (or will contribute) to GHG savings.
- (6) Department Review
 - (a) After a final GHG assessment has been made by MassDOT and the MPOs, MassDOT and the MPOs shall submit MPO-endorsed RTPs, TIPs or projects within 30 days of endorsement to the Department for review of the GHG assessment.
 - (b) The Department shall review the GHG assessments of RTPs, TIPs, STIPs, or projects and shall issue a finding of concurrence or non-concurrence, in writing, within 30 days.
 - (c) If the Department issues a finding of non-concurrence with the GHG assessment, MassDOT and the MPOs, within 30 days, shall convene a meeting with the Department to attempt to resolve any issues which resulted in the finding of non-concurrence.